

**Forth & Tay Regional Advisory Group**  
**Ornithology Subgroup**  
**Monday 29th June 2015, 10:30 – 14:30**  
**Marine Scotland – Marine Laboratory, Aberdeen**

**Minutes – issued as final 28 July 2015.**

**Present:**

- Ian Davies (Chair) *ID* (MSS)
- Jared Wilson *JW* (MSS)
- Nick Brockie *NB* (SSE - Seagreen)
- Esther Villoria *EV* (ICOL – Inch Cape)
- Stephen Kerr *SK* (ICOL – Inch Cape)
- Murray Grant *MG* (Royal Haskoning – Inch Cape)
- Ewan Walker *EW* (Mainstream – NnG)
- Phil Bloor *PB* (Pelagica - NnG)

**By Video Conference**

- Catriona Gall *CG* (SNH)
- Erica Knott *EK* (SNH)
- Aly McCluskie *AM* (RSPB)

**Apologies:** JNCC

**Introductions and Aims**

*ID* (Chair) welcomed everyone to the first Forth & Tay Regional Advisory Group – Ornithology Subgroup (FTRAG-O) meeting.

A draft Agenda had been circulated on 10 June. The aim of the meeting was to discuss the ToR and the key post consent monitoring questions relating the Forth and Tay wind farm developments.

**Terms of Reference**

The Terms of Reference (ToR) had been circulated prior to the meeting on 10 June 2015.

*ID* advised that the ToR for the FTRAG were very similar to the ToR for the Moray Firth RAG-O (MFRAG-O) and welcomed any comments.

It was discussed and confirmed that FTRAG-O only applied to the four consented wind farms within the Forth and Tay area and no other projects or activities were

included. Each organisation is to provide a single key point of contact and identify a relevant technical specialist.

There was a request for clarification on the relationships between the FTRAG-O subgroup and the main FTRAG and whether the ToR for FTRAG had been approved. Although it was unknown whether the ToR had been approved it was agreed to proceed on the assumption that they had.

SNH asked for further clarification on how Groups would work effectively with the Scottish Offshore Renewables Research Framework (SpORRAn).

The Chair asked around the table whether there was agreement on the FTRAG-O ToR. There was general, qualified agreement on the ToR, with comments previously been provided by Inch Cape and NnG.

The Chair asked for any additional comments on the ToR to be provided to him by the end of the week (3 July 2015).

MSS requested that the Forth and Tay developers should decide how the secretariat for FTRAG-O should operate. Future meetings might not be chaired and led by MSS.

### **Key Post Consent Monitoring Questions in the Forth & Tay**

The document titled *Key Post Consent Monitoring Questions in the Forth & Tay* had been circulated to the Group on 12 June 2015.

*JW* introduced the document explaining that the structure was very similar to one prepared for the MFRAG-O and was considered an appropriate approach to develop suitable monitoring questions. It was recognised that there were obvious differences in the species and designated sites being considered between the regional groups, with Forth and Tay having a wider selection of designated sites and more species to be considered and therefore having potentially more challenges in developing monitoring studies. Furthermore, there may be differences in concerns and priorities between the developers. However, there will be similarities to be found and where they exist, cooperation in developing monitoring strategies and approaches between the developers should be encouraged. This is particularly the case where potential for cumulative impacts are of greatest concern.

**Priority Species.** *JW* presented the priority species list that reflects the seabird species identified as potentially affecting all four projects. They are based on the findings of the Appropriate Assessments undertaken for each of the projects in combination.

It was suggested that the species priority should also take into consideration both the absolute numbers and the relative proportion of the populations predicted to be impacted by each of the developments and that it should be recognised that different projects will be likely to have differing priority species. *SK* queried why razorbill might be considered a species of high priority with respect from displacement when very few have been predicted to be impacted. Similarly, *SNH* suggested that guillemot might be considered to be of lower priority.

It was agreed that both Gull species (herring gull and lesser black-backed gull) were of lower priority but where future studies (e.g. surveys of seabird distributions at sea), that were focussed on the higher priority species, were undertaken there should be recognition that data obtained on Gulls may also be useful.

It was agreed that all species/SPAs presented in the Appropriate Assessment would be listed and reasons for prioritisation recorded.

**Priority Protected Sites.** The priority protected sites have been identified based on the level of connectivity between the seabird species and the site and discussion within the Appropriate Assessment. There was agreement that the main sites of concern was the Forth Islands SPA together with kittiwakes from Fowlsheugh and to lesser extent St Abb's also of concern.

*AM* raised awareness of the potential for seabirds from the Buchan Ness to Collieston Coast SPA also occurring in the proposed wind farm development areas and that future studies should be aware of this. Following discussions, the level of connectivity was recognised to be relatively low compared to the other SPAs mentioned above and there was acceptance that it should not be a focus of effort, although the site should not be forgotten about.

The Group discussed the possible inclusion of the Firth of Forth and Tay Bay Complex draft SPA (dSPA), recognising that this could be designated in the future. It was agreed that this dSPA should be included in the SPA list as a 'placeholder', but that it should not be treated in the same way as the other SPAs given that there has not yet been formal public consultation. It was agreed that its inclusion within future monitoring programmes would be discussed at the next FTRAG-O meeting.

**Key PCM Questions.** *JW* introduced the key post consent monitoring (PCM) list of questions explaining that the aim of the questions was to identify the information required in order to quantify potential effects from the proposed wind farms.

*NB* raised the importance of having accurate seabird colony counts against which effects could be assessed. There were questions raised on how up-to-date the seabird colony counts might be, particularly for Fowlsheugh and St Abb's colonies and also for some species (e.g. gulls and puffins) at the Forth Islands. The Group agreed that it would be good to have a better understanding on when colony counts have been undertaken. *AM* would check to see what counts were being undertaken at Fowlsheugh and *CG/EK* would find advise the Group on the SNH commissioned colony counts (Forth Islands and St Abb's Head).

1. **Connectivity between seabird colonies and seabirds affected by wind farms.** It was recognised that the use of tags provided valuable information for determining connectivity between breeding seabird colonies and wind farm development areas. However, the Group did not feel that they had a complete picture of all the tagging studies that had been or are being undertaken and that this was an important gap in our understanding on what data have already been collected. It was known that CEH, RSPB (FAME) and Leeds University (Keith Hamer) have all got some tagging data but not all the data are readily available (or necessarily known to the group).

*ID/JW* were tasked to approach CEH for an update on the tagging studies that they have been undertaking and *AM* would identify suitable data obtained during the FAME project. *ID/JW* to identify latest gannet tagging data and *EW/PB* were tasked to pull together a summary table of all known tagging studies from the relevant SPAs to help inform future tagging requirements.

Once this task is completed it was suggested that a comparison of the tagging study results with outputs from the SNH apportioning tool that was used to support the AA could be valuable. There was no action on this point.

2. **Avoidance rates of kittiwake and gannet.** It was agreed that PCM Question 2, '*GANNE and KITTI avoidance rates*' was similar to PCM Question 10, '*Avoidance rates (or collision rates) of GANNE and KITTI (and potentially lbbgu & hergu)*' and that Question 2 should be replaced with Question 10.

Developers expressed concerns expressed that although measuring avoidance rates *per se* is important in order help validate collision risk models it is not necessarily a priority for the developers as the resulting data are unlikely to provide measures that will directly identifying the level of impact that the wind farms might have. It was thought that exploring the potential for measuring actual collisions should be more of a priority, although this is more challenging to achieve and the potential feasibility of such approaches would require careful consideration. Depending on the method for monitoring collisions, data on avoidance behaviour could also be collected.

In relation to measuring avoidance rates or collisions the question of whether pre-construction measures were required was raised but no firm conclusions were reached. SK stated that further 'baseline' work needed to have a proper justification in terms of its specific function or aim.

It was agreed that any future studies should learn from the on-going ORJIP project and that power analysis should be considered to determine the level of impact required in order to detect population level effects.

3. **Flight heights.** Question 3 '*GANNE and KITTI flight heights*' and Question 9 were the same. There were concerns raised that, as for avoidance rates, collecting data on flight heights was not necessarily a priority for developers to determine levels of impact from their projects and obtaining funding for what could be considered non-priority studies would be challenging.

AM suggested that the subject should be considered more broadly as 'flight behaviour' and that not only was there a requirement to get better validated flight height data but precise or reliable measures of other data such as bird flight speed is lacking and yet is an important input into the collision risk models. The Group was made aware of a sensitivity analysis study undertaken by Liz Masden, which is now available. ID agreed to confirm whether the report was available and if so circulate it to the Group members.

The Group recognised that although obtaining data to help validate collision risk models may be appropriate, it was also important to distinguish between information required to support the models and data required to measure actual impacts. It is likely that some data obtained to inform the latter will also inform the former and future studies should be aware of this when being designed.

4. **Population level impacts.** Question 4, 7 and 9 were considered to be very similar. '*Impacts on GANNE, KITTI, PUFFI, RAZOR, GUILL, hergu & lbbgu populations with connectivity to the WFs (e.g. change in adult or chick survival, productivity, population size)*'. They all related to the question of, if effects from wind farms do occur what impact, if any, will they have on the species.

It was agreed that this was an extremely challenging and important question to answer and would require a considerable amount of thought before any

studies could be designed. The key problem is the feasibility of isolating any wind farm effects from the larger-scale processes that are driving seabird population trends. However, the seabirds on the Isle of May have been intensively studied over many years and consequently, are probably some of the best colonies available for assessing the potential to design studies that investigate possible wind farm related impacts.

It was agreed that CEH who have conducted the long-term studies on the Isle of May seabird populations should be approached to determine whether they consider such objectives to be feasible and, if so, whether they can propose suitable approaches. The Group also recognised that there might be sources of data, other than those from the Isle of May, that could be useful to meeting this objective.

There was discussion and general agreement that power analysis is a useful tool to help determine what level of impact is required to occur in order to detect a population level effect. Some developers have previously undertaken power analysis based on their baseline data to help inform their future monitoring programmes.

5. **Displacement effects.** There was a short discussion on Question 5, '*Proportion of PUFFI, RAZOR, KITTI, GANNE and GUILL displaced from the WF*'. It was agreed that studies to assess potential levels of displacement were important and that the species identified were appropriate target species (bearing in mind the caveats detailed above concerning the extent to which razorbill and guillemot should be regarded as a priority species).

The benefit of undertaking power analyses to inform the design of surveys to assess displacement effects was again highlighted in discussions.

6. **Barrier effects.** There was a short discussion on Question 6, '*Proportion of PUFFI, RAZOR, KITTI, GANNE and GUILL deterred from passing through the WF*'. It was agreed that studies to assess potential barrier effect were important and that the species identified were appropriate, although there was no clarity on how such work could disentangle displacement and barrier effects.

Following completion of the PCM questions the meeting was closed. There was no discussion on the questions within Table 1 *Key Questions/Hypotheses*.

**Next Meeting.** Based on the experience with the similar MFRAG-O, *ID* recommended a series of relatively frequent meetings to ensure progression. No date for the next meeting was set and this will be confirmed later.

## **Actions**

1. *ALL* – to provide Chair key points of contact and technical specialist.
2. *ID* – To advise whether ToR for FTRAG have been approved.
3. *ID/JW* – to provide clarification on how FTRAG-O will work with SpORRAn.
4. *ALL* – to provide final comments on the ToR to *ID* by 3 July 2015.
5. *JW* – to provide clarification on why razorbill is of high priority and guillemot is of medium priority.
6. *JW* – to add a ‘placeholder’ for the Firth of Forth and Tay Bay Complex dSPA. To be discussed at next meeting.
7. *EK/CG* – to advise group of colony count data commissioned by SNH,
8. *AM* – to advise group of colony count data from Fowlsheugh,
9. *ID/JW* – to contact CEH for latest tagging studies.
10. *AM* – to advise on FAME data.
11. *ID/JW* - to contact Keith Hammer for gannet tagging data.
12. *EW/PB* to identify sources of existing tagging data.
13. *ID* – to determine availability of CRM sensitivity analysis report.
14. *ID/JW* – To contact CEH about identifying whether they consider the determination of population effects to be a feasible objective and, if so, the possible approaches to addressing this.

## **Post Meeting Note**

An Action on all FTRAG members was to provide final comments on the ToR by 3 July 2015. The only response received was from the JNCC that confirmed that they had no comments on the ToR. MSS have requested copies of previously provided comments by Inch Cape and NnG.

A revision to the minutes has highlighted that Forth and Tay developers should decide how the secretariat for FTRAG-O should operate. There is an Action on the developers to progress this.

There was no Action taken for the arrangement of the next FTRAG-O meeting. PB to circulate a Doodle Poll for meeting in Early September.

## **Post Meeting Actions**

15. Inch Cape and NnG - to provide copies of previously sent comments on the ToR.
16. Developers – to agree on how the FTRAG-O should operate before next meeting.
17. EW to circulate Doodle Poll for meeting in early September.